



OIPE

RAW SEQUENCE LISTING DATE: 02/12/2002 PATENT APPLICATION: US/10/053,410 TIME: 12:00:32

Input Set : A:\1276SEQLIST.TXT

																-		
	4	<110>	API	PLIC	ANT:	Sewa	alt,	Vind	cent	J. 1	Η.					F	VTF	RE
	5		Jui	ng, I	Rudo:	Lf										-		
	6		Hu	, Wa	ng-Na	an												
	7		Mee	eley	, Rol	ert	В.											
	9	<120>	TI	rle (	OF II	VEN	CION	: Imp	prove	ed G	rain	Qua:	lity	Thre	ough	Alte	ered	
	10		Exp	res	sion	of S	Seed	Pro	teins	5								
	13	<130>	FI	LE R	EFERI	ENCE	: 127	76										
C>	15	<140>	CUI	RREN'	r API	PLIC	ATIO	NUI	MBER	: US	/10/	053,4	410					
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	15	<150>	PR:	IOR I	APPL:	CAT	ON 1	NUMBI	ER: (	JS 60	0/240	6,45	5					
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		<221>				CDS												
		<222>		•			٠	(1004	1)									
		<223>						•	•	amma ·	-zei:	n pro	olam:	in/Pi	ra 22	272		
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	33	gtgt	atti	tge a	actca	atge	at ca	acaaa	aacat	t cet	ttcta	atca	gta	ccato	caa 1	tcato	cattca	60
	34			-		-							_				aaacc	119
	35				gtg													167
	36	Met	Lys	Leu	Val	Leu	Val	Val	Leu	Ala	Phe	Ile	Ala	Leu	Val	Ser	Ser	
	37	1	_			5					10					15		
	39	gtt	tct	tgt	aca	cag	aca	ggc	ggc	tgc	agc	tgt	ggt	caa	caa	caa	agc	215
	40	Val	Ser	Cys	Thr	Gln	Thr	Gly	Gly	Cys	Ser	Cys	Gly	Gln	Gln	Gln	Ser	
	41				20					25					30			
	43	cat	gag	cag	caa	cat	cat	cca	caa	caa	cat	cat	cca	caa	aaa	caa	caa	263
	44	His	Glu	Gln	Gln	His	His	Pro	Gln	Gln	His	His	Pro	Gln	Lys	Gln	Gln	
	45			35					40					45				
	47	cat	caa	cca	cca	cca	caa	cat	cac	cag	cag	cag	caa	cac	caa	caa	caa	311
	48	His	Gln	Pro	Pro	Pro	Gln	His	His	Gln	Gln	Gln	Gln	His	Gln	Gln	Gln	
	49		50					55					60					
	51	caa	gtt	cac	atg	caa	cca	caa	aaa	cat	cag	caa	caa	caa	gaa	gtt	cat	359
	52	Gln	Val	His	Met	Gln	Pro	Gln	Lys	His	Gln	Gln	Gln	Gln	Glu	Val	His	
	53	65					70					75					80	
	55	gtt	caa	caa	caa	caa	caa	caa	ccg	cag	cac	caa	caa	caa	caa	caa	caa	407
	56	Val	Gln	Gln	Gln	Gln	Gln	Gln	Pro	Gln	His	Gln	Gln	Gln	Gln	Gln	Gln	
	57					85					90					95		
	59	caa	cag	cac	caa	caa	caa	cat	caa	tgt	gaa	ggc	caa	caa	caa	cat	cac	455



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Output Set: N:\CRF3\02122002\J053410.raw

60 61	Gln	Gln	His	Gln 100	Gln	Gln	His	Gln	Cys 105	Glu	Gly	Gln	Gln	Gln 110	His	His	
63	caa	Caa	tca		aac	cat	ata	Caa		Cac	maa	caσ	agg		nan	caa	503
64			Ser								-	_	-		_		303
	GIII	GIII		GIII	GLY	птъ	Val		GIII	urs	Giu	GIII		птъ	GIU	GIII	
65			115					120					125				E E 1
67			gga	_	_										_	-	551
68	His	Gln	Gly	Gln	Ser	His	Glu	Gln	Gln	His	Gln	Gln	Gln	Phe	Gln	Gly	
69		130					135					140					*
71	cat	gac	aag	cag	caa	caa	cca	caa	cag	cct	cag	caa	tat	cag	cag	ggc	599
72	His	Asp	Lys	Gln	Gln	Gln	Pro	Gln	Gln	Pro	Gln	Gln	Tyr	Gln	Gln	Gly	
73	145	_	-			150					155		_			160	
75	cag	gaa	aaa	t.ca	caa	caq	caa	caa	t.at.	cat	tac	cag	gag	cag	caa	cag	647
76	-	~	Lys			_			_		-	-		_		-	/
77	GIII	GIU	цуз	OCI	165	01.11	0111	OIII	Cyb	170	Cys	0.111	O L u	9111	175	QIII	
																	605
79			agg	_	_					_	_	~					695
80	Thr	Thr	Arg	_	Ser	Tyr	Asn	Tyr	-	Ser	Ser	Ser	Ser		Leu	Lys	
81				180					185					190			
83	aat	tgt	cat	gaa	ttc	cta	agg	cag	cag	tgc	agc	cct	ttg	gta	atg	cct	743
84	Asn	Cys	His	Glu	Phe	Leu	Arg	Gln	Gln	Cys	Ser	Pro	Leu	Val	Met	Pro	
85			195					200					205				
87	ttt	ctc	caa	tca	cat	tta	ata	caa	cca	agt	agc	tac	caq	qta	ttq	caq	791
88			Gln														
89		210	0.2		5		215	<b></b>				220					
91	022		tgt	+ a+	na+	rat		ann.	Cac	2++	nan		Caa	tac	att	CaC	839
																	037
92		GTII	Cys	Cys	HIS		Leu	Arg	GTII	TTE		PIO	GTII	тут	116		
93	225					230					235					240	005
95			atc														887
96	Gln	Ala	Ile	${ t Tyr}$	Asn	Met	Val	Gln	Ser	Ile	Ile	Gln	Glu	Glu	Gln	Gln	
97					245					250					255		
99	caa	caa	cca	tgt	gag	tta	tgt	gga	tct	caa	caa	gct	act	cca	aag	tgc	935
100	Gli	Gli	n Pro	Cys	s Glu	ı Leı	і Суя	Gly	z Ser	Glr	ı Glr	n Ala	Thi	Pro	Lys	s Cys	
101				260			-		265					270			
103	aat	. aad	aat	. ctt	. gad	a a c	ago	aca	ata	a cct	acc	ato	aat	ato	a cad	g ctt	983
104					-	-	_							_		J Leu	
105	0_	, 01	275					280					285			,	
107	~+·		a cto							+~~	200	.~~-			- 2 0 + 0		1034
	_								LCCo	rege	ayca	iycac	ity a	icaci	ayı	99	1024
108	va.		) Lei	1 116	s rec	PIC	-										
109		290					295										
111	_	_		_	_	_	-		-	_	atac	c tca	itata	acg	gtgt	ttaagca	1094
112	ata	aaagt	cacc	atac	catta	atg a	atgtt	caaaa	ıa aa	aaaa							1129
114	<210	)> SI	EQ II	ON C	: 2												
115	<213	L> LI	ENGTI	1: 29	95												
116	<212	2> TY	PE:	PRT													
			RGAN		Zea	mav	3										
			EQUE														
120						ı Va	[ Val	ום.]	. Al≃	, Phe	112	- Δ1 <i>=</i>	ı T.e.ı	ı Val	Sei	r Ser	
121	1	- Lys	יבעני	. , 41	5 <u>Бе</u>		. vu			10		- 43±L			15		
			A 0	<b>መ</b> ኤ-		, տե-		. 01-				- C1-	, (1-			Cor	
122	va.	L Sel	LCYS		. G.LI	1 1111	. GI	( GT)		s ser	. Cys	י פדי	GIL		1 911	n Ser	
123				20					25					30			



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Input Set : A:\1276SEQLIST.TXT

124 125	His	Glu	Gln 35	Gln	His	His	Pro	Gln 40	Gln	His	His	Pro	Gln 45	Lys	Gln	Gln	
126 127	His	Gln 50		Pro	Pro	Gln	His 55		Gln	Gln	Gln	Gln 60		Gln	Gln	Gln	
128			His	Met	Gln			Lys	His	Gln			Gln	Glu	Val		
129	65	<b>01</b>	<b>a</b> 3	<b>61</b> .	<b>a</b> 1	70	<b>01</b> .	<b>D</b>	<b>01</b>	·	75	01	<b>a</b> 1	<b>01.</b>	<b>03</b>	80	
130 131	Val	GIn	GIn	GIn	GIn 85	GIn	Gln	Pro	GIn	His 90	GIn	GIn	GIn	GIn	95	GIn	
132 133	Gln	Gln	His	Gln 100	Gln	Gln	His	Gln	Cys 105	Glu	Gly	Gln	Gln	Gln 110	His	His	
134 135	Gln	Gln	Ser 115	Gln	Gly	His	Val	Gln 120	Gln	His	Glu	Gln	Ser 125	His	Glu	Gln	
136	His	Gln		Gln	Ser	His	Glu		Gln	His	Gln	Gln		Phe	Gln	Glv	
137		130	1				135					140				-	
138	His	Asp	Lys	Gln	Gln	Gln	Pro	${\tt Gln}$	Gln	Pro	${\tt Gln}$	Gln	Tyr	Gln	Gln	Gly	
139	145					150					155					160	
140	Gln	Glu	Lys	Ser		Gln	Gln	Gln	Cys	His	Cys	Gln	Glu	Gln	Gln	Gln	
141					165					170					175		
142 143	Thr	Thr	Arg	Cys 180	Ser	Tyr	Asn	Tyr	Tyr 185	Ser	Ser	Ser	Ser	Asn 190	Leu	Lys	
144	Asn	Cys	His	Glu	Phe	Leu	Arg	Gln	Gln	Cys	Ser	Pro		Val	Met	Pro	
145			195					200	_			_	205		_		
146	Phe		Gln	Ser	Arg	Leu		Gln	Pro	Ser	Ser	_	Gln	Val	Leu	Gln	
147	<b>61</b>	210	<b>a</b>	<b>a</b>	77.2 -	3	215	3	~1	T1 -	a1	220	<b>~1</b>	OT	T7 -	rrd	
148		GIN	Cys	Cys	HIS		Leu	Arg	GIN	Ile		PIO	GIN	туг	11e		
149	225	31-	<b>71.</b>	m	3	230	17a 1	<b>01</b> m		т1 о	235	~1 n	<b>61.</b>	G1	015	240	
150 151	GIII	Ala	116	TAT	245	Met	val	GIII	ser	11e 250	116	GIII	Glu	GIU	255	GIII	
152	Gln	Gln	Dro	Cve		T.011	Cve	G1 v	Sor	Gln	Gln	λla	Thr	Dro		Cve	
153		GIII	110	260	Giu	пеа	Cys	GLY	265	GIII	GIII	AIG	1111	270	БуЗ	Cys	
154		Glv	Δsn		Asn	Ser	Ser	Thr		Pro	Thr	Tle	Asn		Arσ	Leu	
155	_	O <sub>T</sub>	275	LCu	nsp	DCI	001	280	110	110		110	285	,	*** 9	104	
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157		290					295										
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171	acaa	agtg	gcg a	acaga	acaaa	ag at	tttgi	gag	g gto	gatco	cgcg	ctga	agaaq	gag a			116
172																Ala	
173										_+-	<b>.</b>	د.		<b></b>	1	m+ m	1.04
175										ctg							164
176	ьys	тте	ата	ALA	Ala	ATA	ALA	AIA	Ala	Leu	Cys	Fue	ATG	ATG	ьeu	val	



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177		5					10					15				
177 179	gcc gt	_		tac	caa	aac		atc	σασ	caa	caq		ctc	agg	αac	212
180	Ala Va															
181		20	u vui	Cys	0111	25	Olu	,	OLU	**** 9	30					
183	ctg ca		c taa	car	ααα		саσ	ααα	age	cca		gac	aca	tac	cac	260
184	Leu Gl															
185	35	.n cy	3 11P	GIII	40	V U I	0111	Ola	DCI	45	Deu	1100		O <sub>I</sub> D	50	
187	cag gt	o at	c dac	caa		cta	acc	aac	aac		aac	aac	aac	ggc		308
188	Gln Va	1 7.0	u Nen	Δra	Gln	T.AII	Thr	Glv	Glv	Glv	Glv	Glv	Glv	Glv	Val	
189	GIII V	rr ne	u nsp	55	0111	LCu	1111	OL,	-60	021	<b>U</b> _1	011	O#1	65	,	
191	ggc co	a tt	c caa		aac	acc	aaa	ctc		atα	caa	tac	tac		cag	356
192	Gly Pi															
193	GLY 11	.0 .11	70		011	1 ***	011	75	*** 9		5	012	80			
195	ctc ca	an na		age	cac	σασ	tac		tac	acc	acc	atc	caa	agc	atg	404
196	Leu G	in Ac	n Val	Ser	Δra	Glu	Cve	Ara	Cvs	Ala	Ala	Tle	Ara	Ser	Met.	
197	neu G		5 Var	UCI	my	Olu	90	**** 9	0,10			95	9			
199	gtc ag	_	-	σασ	σασ	acc		cca	cca	cta	gag		aac	taa	taa	452
200	Val A	19 99 ca Gl	v Tur	Clu	Glu	Δla	Met	Pro	Pro	Len	Glu	Lvs	Glv	Trp	Trp	
201	10		1 -1-	Ozu	u_u	105					110	-1-	1			
203	cca to		a caa	cad	cad		cca	cca	cca	cag		σσα	σσα	σσa	σσα	500
204	Pro Ti	rn Gl	y Ara	Gln	Gln	Gln	Pro	Pro	Pro	Gln	Glv	Glv	Glv	Glv	Glv	
205	115		7	V-1.	120	J				125	2	4	4	-	130	
207	cag gg	ים ממ	c tac	tac		ccc	tac	aσc	caa		ασa	σασ	ααa	tac	qqc	548
208	Gln Gl															
209	Q111 O.	-, 0-	1 -1-	135	-1-		-1-		140				•	145	•	
211	tac g	at da	a aat		cag	caa	cag	atσ		cca	cca	tat	cat	ccc	ggc	596
212	Tyr G															
213	171 0	-1 0-	150	1		5		155	- 2 -			-	160		-	
215	acc ac	cc aa		aaa	cca	agg	atc	qqc	cqc	qtq	agg	ctt	acg	aag	gcc	644
216	. Thr Tl															
217		16				,	170		-			175		_	·	
219	cgg ga	ag ta	c acc	aca	qqq	ttq	ccq	atq	atq	tgc	cgg	ctg	tcg	gag	CCC	692
220	Arg G															
221	-	30 -			-	185				-	190					
223	cag ga	ag tg	c age	atc	ttc	tcc	ggc	ggc	gac	cag	tac	tage	ctac	cat		738
224	Gln G		-													
225	195	-			200		_	_		205						
227	ggtta	aagcg	agto	ggcg	cg a	ggtg	caaga	a cg	cage	atgt	gta	ctgt	gcg	cgtg	caaatc	798
228	cagaat	tgacg	tage	tctg	ac g	tggg	ctcg	c aa	tatt	gtcg	cgt	gttc	gtt	acaa	taatga	858
229	taataa	actat	. gagg	aata	aa t	atgg	gaat	g tt	gcca	gata	gta	ctgg	cgc	cggt	tcttca	918
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240	Leu V	al Al	a Val	Ala	Val	Cys	Gln	Gly	Glu	Val	Glu	Arg	Gln	Arg	Leu	



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241			<b>-</b>	20	0	M	a1	a1	25	<b>a</b> 1	<b>01</b>	<b>a</b>	D	30	3	71.	
242	Arg	ASP		GIN	Cys	ттр	GIII	Glu 40	vaı	GIII	GIU	Ser	45	ьеи	ASP	Ala	
243	0	7	35	3703	Tou	7 ~~	7 20		Ton	mbs	C1 11	C1**		Clar	C117	C117	
244	Cys		GTII	var	rea	ASP	55	Gln	Leu	THE	GTĀ	60 61	GLY	GTA	GTY	GIA	
245	01	50	01	D	Dha	7		01	mh	<b>61</b>	T		Wat	3	O	0	
246	_	val	GIY	Pro	hue		ттр	Gly	THE	GΙΆ		Arg	Mec	Arg	Cys		
247	65	a1	<b>.</b>	01	<b>3</b> ~ ~	70	0	7	a1	<b>a</b>	75	a	7 1 n	× 1	т1.	80	
248	GIN	GIN	Leu	GIN	_	val	ser	Arg	GLU		Arg	Cys	Ala	Ald		Arg	
249	<b>a</b>	11 - L	**- 1	*	85	m	a1	<b>~1</b>		90	D	D o	T	<b>~1</b>	95	G1	
250	ser	мет	vaı	_	GTA	Tyr	GIU	Glu		met	Pro	PLO	red		гĀг	GIA	
251		<b></b>		100	a)	3	01	<b>a</b> 1	105	D	D	D	<b>a</b> 1	110	<b>a</b> 1	a)	
252	Trp	Trp		_	GTA	Arg	GIN	Gln	GIN	Pro	Pro	Pro		GTĀ	GTĀ	GTÀ	
253	~ 1	~ 1	115		<b>a</b> 2	m	<i></i>	120	<b>D</b>	<b>0</b>	<b>~</b>	•	125	<b>01</b>	<b>71.</b>	<b>01</b>	
254	GTA	_	GIN	GIY	GIY	Tyr		Tyr	Pro	Cys	ser		Pro	GTĀ	GIU	СТА	
255		130		<b>~</b> 2	<b>a</b> 2	<b>a</b> 1	135	<b>~</b> 2		<b>01</b>	10. ±	140	D	D	<b>a</b>		
256	_	GTA	Tyr	GIA	GIn	_	GTĀ	Gln	Arg	GIN		туr	Pro	Pro	Cys		
257	145		~.		<b>a</b> 1	150	<b>~</b> ?	_	_ (	~ 1	155		7	•	<b>-</b>	160	
258	Pro	GLY	Thr	Thr	_	GIĀ	GTĀ	Pro	Arg		GLY	Arg	vaı	Arg		Tnr	
259					165			- 1	_	170			~		175	<b>a</b>	
260	Lys	Ala	Arg		тyr	Ala	Ala	Gly		Pro	Met	met	Cys		Leu	ser	
261		_		180			_,		185			_	~1	190			
262	GLu	Pro		GIU	Cys	ser	тте	Phe	Ser	GTÀ	GLY	Asp		Tyr			
263			195					200					205				
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VERIFICATION SUMMARY

PATENT APPLICATION: US/10/053,410

DATE: 02/12/2002

TIME: 12:00:33

Input Set :  $A:\1276SEQLIST.TXT$ 

Output Set: N:\CRF3\02122002\J053410.raw

L:15 M:270 C: Current Application Number differs, Replaced Current Application No

L:15 M:271 C: Current Filing Date differs, Replaced Current Filing Date